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10/609,257	06/27/2003	Peiya Liu	2003P09355US	7769

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Siemens Corporation
Intellectual Property Department
170 Wood Avenue South
Iselin, NJ 08830

EXAMINER

PADMANABHAN, KAVITA

ART UNIT	PAPER NUMBER
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2161

DATE MAILED: 08/03/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/609,257

Applicant(s)

LIU ET AL.

Examiner

Kavita Padmanabhan

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 05 May 2006.
2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 39-45 is/are pending in the application.
4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5) ☐ Claim(s) _____ is/are allowed.
6) ☒ Claim(s) 39-45 is/are rejected.
7) ☐ Claim(s) _____ is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
10) ☒ The drawing(s) filed on 27 June 2003 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Status of Claims

1. Claims 1-38 have been canceled.
2. Claims 41-45 have been added.
3. Claims 39-45 are pending.
4. Claims 39-45 are rejected.

Drawings

5. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the method steps recited in claims 39-45 must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet"

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pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 112

6. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

7. **Claims 39-45** are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter, which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. With respect to claim 39, there does appear to be support in the applicant's specification for a single document tree representing elements of a plurality of documents, as recited in line 3 of claim 39.

8. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

9. **Claims 44-45** are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 44 recites the limitation "said element datatypes" in line 2 of the claim. There is insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 101

10. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

11. **Claims 39 and 44-45** are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

Claims 39 and 44-45 appear to be directed towards abstract ideas and do not appear to produce a useful, concrete and tangible result. For example, with respect to claim 39, applying logic formalism and specifying relationships does not appear to be a tangible result. Claims 44-45 are similarly rejected. Claims 40-43 appear to overcome the deficiencies of claim 39.

The examiner will apply prior art to these claims as best understood, with the assumption that applicant will amend to overcome the stated 101 rejections.

Claim Rejections - 35 USC § 102

12. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

13. **Claims 39-45** are rejected under 35 U.S.C. 102(b) as being anticipated by **Liu et al., “A Logic Approach for MPEG-7 XML Document Queries,” pages 1-15, Extreme Markup Languages 2001, August 2001** (hereinafter “Liu ‘01”).

In regards to **claim 39**, **Liu '01** teaches a computer-implemented method for structured multimedia content retrieval, said method comprising:

- providing a document tree representing elements of a plurality of multimedia XML documents (**Liu '01; p1, paragraphs 3 and 4**); and
- applying a query language based on logic formalism for content retrieval, said logic formalism including element predicates and path predicates for asserting logical truth statements about said plurality of multimedia XML documents represented in said document tree (**Liu '01; p1, paragraphs 3 and 4; p10, paragraph 1**),
- wherein the element predicates are atomic formulas expressed as $E(x1, x2, \dots, xn, c, t, a)$, where E is an element predicate and each of $x1, x2, \dots, xn, c, t, a$ is a constant or variable, the element predicate $E(x1, x2, \dots, xn, c, t, a)$ is a logic assertion that element “t” at address “a” contains “c” with attributes $x1, x2, \dots, xn$ in said document tree (**Liu '01; p10, bullet a**), and
- wherein the path predicates are expressed as $P(x1, x2, \dots, xn, c1, c2, \dots, cm, t1, t2, tp, a1, \dots, aq, d1, \dots, dr)$, where $x1, x2, \dots, xn, c1, c2, \dots, cm, t1, t2, tp, a1, \dots, aq, d1, \dots, dr$ are logic variables for representing element attributes, element contents, tag names, element addresses, and element datatype members, respectively (**Liu '01; p10, paragraph 2**); and
- specifying spatial and temporal relationships pertaining to said plurality of multimedia XML documents to support XML document retrieval and modification of said multimedia XML documents (**Liu '01; p1, paragraph 3**).

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In regards to **claim 40**, **Liu '01** teaches the computer-implemented method as recited in claim 39, comprising:

- generating a description from a video based on a scene change technique (**Liu '01; p6, paragraph 2**), said generating including the steps of:
 - (a) breaking down the video temporally into scenes or shots using scene change detection algorithms that can detect both abrupt as well as gradual changes (**Liu '01; p6, paragraph 2**);
 - (b) outlining user-identified objects of interest within said scenes (**Liu '01; p6, paragraph 2**);
 - (c) tracking said user-identified objects (**Liu '01; p6, paragraph 2**);
 - (d) creating a node point where a significant motion change wherein a linear mode is inadequate (**Liu '01; p6, paragraph 2**);
 - (e) providing the specification of said user-identified objects as any of temporal, audio, and visual datatypes (**Liu '01; p5, Figure 2, paragraph 1**); and
 - (f) providing a description of said user-defined objects as any of spatial, temporal and visual datatypes (**Liu '01; p6, paragraphs 2 and 3**).

In regards to **claim 41**, **Liu '01** teaches the computer-implemented method of claim 40, further comprising providing said tracking said user-identified objects in a semi-automatic manner (**Liu '01; p6, paragraph 2**).

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In regards to **claim 42**, **Liu '01** teaches the computer-implemented method of claim 40, further comprising providing said description of said user-defined objects by the use of abstract datatype techniques (ADT) (**Liu '01; p6, paragraph 3**).

In regards to **claim 43**, **Liu '01** teaches the computer-implemented method of claim 40, further comprising providing said respective datatypes as composite datatypes constructed from more primitive ones (**Liu '01; p6, paragraph 3**).

In regards to **claim 44**, **Liu '01** teaches the computer-implemented method of claim 39, wherein spatial and temporal relationships are derived from said element datatypes (**Liu '01; p6, paragraph 3**).

In regards to **claim 45**, **Liu '01** teaches the computer-implemented method of claim 44, wherein said spatial and temporal relationships are further included in specifications of said multimedia XML documents as complex datatypes (**Liu '01; p6, paragraph 3**).

Response to Amendment

14. Applicant's amendments filed 5/5/06 with respect to the claim objections have been considered. The objections have been withdrawn accordingly.

Response to Arguments

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15. Applicant's arguments filed 5/5/06 with respect to the drawing objections have been fully considered but they are not persuasive.

Applicant argues that 37 CFR 1.839(a) applies only to structural details and that method claims need not be supported by the drawings. The examiner respectfully disagrees and asserts that 37 CFR 1.83(a) recites that "drawings in a nonprovisional application must show every feature of the invention specified in the claims," which does not appear to exclude method claims.

16. Applicant's amendments filed 5/5/06 with respect to the 35 U.S.C. 101 rejections have been considered. However, there does not appear to be a tangible result produced by the method of claims 39 and 44-45. For example, with respect to claim 39, applying logic formalism and specifying relationships does not appear to be a tangible result.

17. Applicant's arguments filed 6/1/06 with respect to the prior art have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

18. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a).

Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period

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will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

19. Any inquiry concerning this communication or earlier communications from the examiner should be directed to **Kavita Padmanabhan** whose telephone number is **571-272-8352**. The examiner can normally be reached on Monday-Friday, 9:00am-5:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Christian Chace can be reached on 571-272-4190. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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K.P.

July 28, 2006


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PRIMARY EXAMINER